

Name \_\_\_\_\_

1. In Australia, tales are told of the Bunyip, a strange creature that lurks in swamps. Thirty out of seventy-five people who claim to have seen a Bunyip describe it as half animal and half human. At this rate, how many witnesses out of 800 would describe it the same way?

2. Find the median of the data set:

$\sqrt{121}$ , 16, 38, 19,  $4^2$ , 23, 18

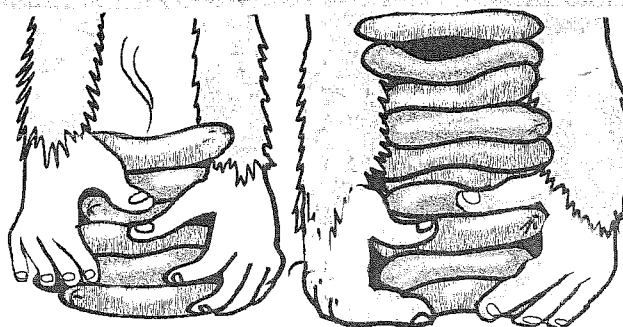
3. Simplify:

$$(3n + 6y) - (5n + 4y)$$

4. Eleven and nine tenths is what percent of eighty-five?

5. The legendary Sasquatch (Bigfoot) and the Yeti (Abominable Snowman) reputedly are large creatures. Charlie makes this claim: "The Sasquatch can eat ten hamburgers per minute. His buddy, the Yeti, is less fond of meat, but still eats six burgers per minute."

Assume Charlie's claim is true. Together, how long would it take the two creatures to devour sixty-four burgers?



Name \_\_\_\_\_

1. What is the additive inverse of the sum?

$$(-16) + (-12)$$

a. 28

b. 1

c. 0

d. -28

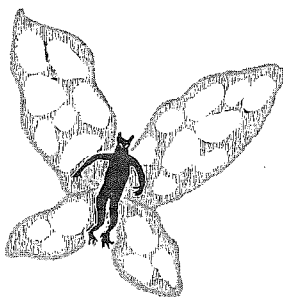
2. Simplify:

$$\frac{36a^5b^4}{4ab}$$

3. Reports of Mothman sightings began in 1966. Legends say the creature has a wingspan three feet wider than its height.

Write two different expressions that show this relationship.

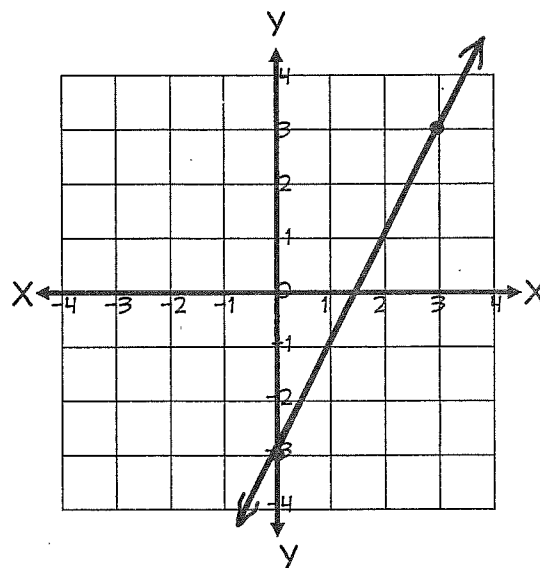
Use  $w$  for wingspan and  $h$  for height.



4. What is the slope of a line with this equation?

$$2x + 5y = 16$$

5. Write an equation in slope-intercept form for the line shown on the graph.



Name \_\_\_\_\_

1. Simplify:  $(\frac{6^2}{9}) + 4(6x - 2)$

2. Climbing in the high Himalayan Mountains at 21,000 feet altitude, British writer Charles Howard-Bury found footprints in the snow. He gave a name to the creature he thought had created them: the Abominable Snowman.

Write this altitude in meters. (Round to the nearest whole meter.)

3. Evaluate:  $y = 4^x$  for  $x = 3$

☐ 256   ☐ 64   ☐ -16   ☐ 1024

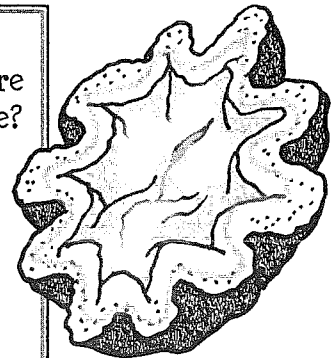
4. Solve the system:  $3x + 2y = 6$   
 $x + y = 0$

a. (6, 2)   b. (6, -2)   c. (-6, 6)

5. The giant clam is the largest living bivalve mollusk. Though it looks strange and has the reputation of being a "man-eating clam," there are no verified reports of any deaths caused by the clam. The clam has a diameter as great as five feet.

What could be the approximate measure of its circumference?

5 m      20 m<sup>2</sup>  
16 ft      2 m  
2 m<sup>2</sup>      5 m<sup>2</sup>  
33 m      79 ft



Name \_\_\_\_\_

1. Simplify:  $\frac{-36a + 6 + (-6)}{6}$

2. Write in scientific notation: **0.000673**

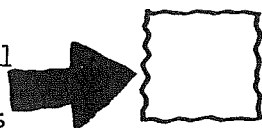
3. Simplify:  $(8p - 4) - (12p - 3)$

4. Since 1975, hundreds of witnesses claim to have seen the Jersey Devil, a strange dog-like beast rumored to roam New Jersey pine forests. The same number claims to have seen Bigfoot in the forests of the northern U.S. and Canada from 1975 to 2005. If the Jersey Devil had been seen at the same rate as Bigfoot, how many Devils would have been spotted from 1735-2005?

Chupacabra Sightings  
2007 - 2008



Jersey Devil Sightings  
1735 - 2005



5. The Chupacabra is a creature said to inhabit parts of Latin America. The table shows some data about sightings of the lizard-like legend.

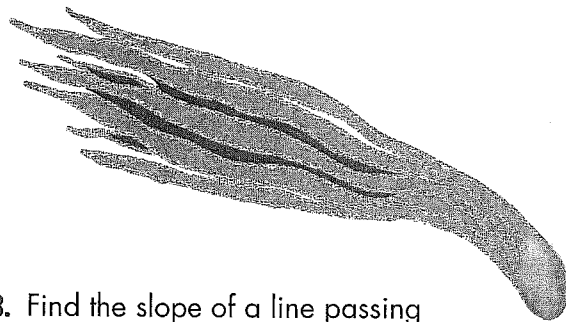
If the number of sightings continue to follow this pattern, what will be the numbers in 2007 and 2008?

Year	Sightings
2001	87
2002	94
2003	101
2004	108
2005	115
2006	122

1. Choose the correct answer.

The Dana octopus squid (a monster-sized creature), blinds and stuns its prey with arms that glow! The largest specimen caught weighed 135 pounds. This weight is closest to

- ☐ 260 kg    ☐ 1350 oz    ☐ 80 kg  
☐ 6100 g    ☐ 61,000 g    ☐ 610 g



3. Find the slope of a line passing through these points: (0, 0) and (4, 2).

2. Solve:

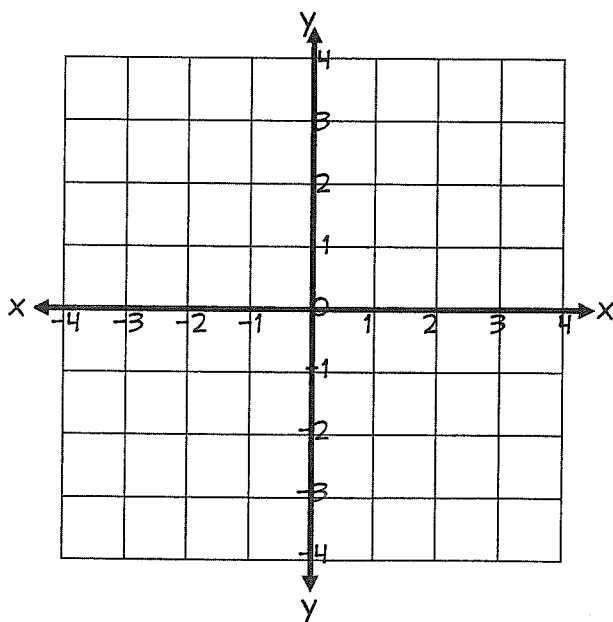
$$-3x + 7 \leq 10$$

4. Factor:

$$3xy^2 + 6x^2y^2 - 3xy$$

## 5. Challenge Problem

- Complete the table to find three points to graph.
- Solve the equation  $y = 2x - 4$  by graphing.
- Explain in your own words what "solve" means.
- Give the solution to the equation: \_\_\_\_\_



$y = 2x - 4$		
x	y	(x, y)
1		
3		
0		